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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,193	01/29/2004	Kang Soo Seo	46500-000577/US	3702
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EXAMINER				
DANG, HUNG Q				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/766,193

Applicant(s)

SEO ET AL.

Examiner

Hung Q. Dang

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6-11,13-15 and 33-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6-11,13-15 and 33-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/23/2008 has been entered.

Response to Arguments

Applicant's arguments filed 06/23/2008 regarding 35 U.S.C. § 101 have been considered but they are not persuasive.

At page 12, citing MPEP § 2106.01, which states, "In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component ..." Applicant argues that the data structures recited in the claims are statutory. In response, the Examiner respectfully disagrees. In contrast with "data structures and computer programs which impart functionality when employed as a computer component," the recited data structure in this case is mere arrangement of data, which are pure data that the "computer components" to operate on, thus not computer component itself. More specifically, with that same "data structure", another component (e.g., implementing another algorithm) may act on it a different way to yield a different result. In other words, this data structure cannot impart functionality. Instead, it is only passive data.

At pages 13-16, citing *In re Lowry*, Applicant concludes that the recited data structure is analogous to those recited in *In re Lowry* because the recited data structure "dictates how application programs reproduce data."

In response, the Examiner respectfully disagrees. As pointed out above, in contrast with Applicant's arguments, the data structure recited in the claims does not dictate how application program reproduce data because different programs can read in this same data structure yet process it in a different predetermined way producing different results.

For ongoing reasons, rejections over 35 U.S.C § 101 stand as previously presented.

Applicant's arguments filed 06/23/2008 regarding 35 U.S.C. § 103 have been considered but are moot in view of the new ground(s) of rejection.

Information Disclosure Statement

The information disclosure statement filed 06/23/2008 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Document JP 2001-86458 is not found and the its designated number cannot locate the document.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Art Unit: 2621

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Nonfunctional descriptive material that does not constitute a statutory process, machine, manufacture or composition of matter and should be rejected under 35 U.S.C. Sec. 101. Certain types of descriptive material, such as music, literature, art, photographs, and mere arrangements or compilations of facts or data, without any functional interrelationship is not a process, machine, manufacture or composition of matter. USPTO personnel should be prudent in applying the foregoing guidance. Nonfunctional descriptive material may be claimed in combination with other functional descriptive multimedia material on a computer-readable medium to provide the necessary functional and structural interrelationship to satisfy the requirements of 35 U.S.C. Sec. 101. The presence of the claimed nonfunctional descriptive material is not necessarily determinative of nonstatutory subject matter. For example, a computer that recognizes a particular grouping of musical notes read from memory and upon recognizing that particular sequence, causes another defined series of notes to be played, defines a functional interrelationship among that data and the computing processes performed when utilizing that data, and as such is statutory because it implements a statutory process.

Claims 1-2, 4, and 6-15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows.

Claims 1-2, 4, and 6-15 recite "data structure for managing reproduction duration of still pictures", which do not impart functionality to a computer or computing device, and is thus considered nonfunctional descriptive material. Such nonfunctional descriptive material, in the absence of a functional interrelationship with a computer, does not constitute a statutory process, machine, manufacture or composition of matter and is thus non-statutory per se.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 4, 8-11, 13-15, 33-34, 38-40, and 42-44 are rejected under 35

U.S.C. 103(a) as being unpatentable over Okada et al. (US Patent 6,122,436), Kanazawa et al. (US Patent 6,580,870), Kato et al. (US 2002/0145702), and Yoshimura et al. (US Patent 6,157,769).

Regarding claim 1, Okada et al. disclose a recording medium having a data structure for managing reproduction duration of still images, comprising: a data area (Fig. 8a) strong presentation data, the presentation data being divided into a number of still picture units (Fig. 9), each still picture unit including at least one still picture and associated related data, the related data not including audio data (Fig. 20e), decoding start time DTS#1 associated with the still picture V1).

However, Okada et al. do not disclose multiplexing of the still images into transport streams; and a navigation area storing at least one playlist and at least one clip information file separately within the navigation area, the playlist including at least one playitem, the playitem indicating at least one of the still picture units to reproduce and providing first and second duration information for display of the still picture in the still picture unit, and the clip information file including at least one entry point map, the entry point map including at least one entry point providing at least an address of a still picture in the transport stream; wherein the first duration information indicates whether to display the still picture for one of a finite and an infinite period of time; and the second

duration information indicates a length of time to display the still picture when the first duration information indicates to display the still picture for a finite period of time.

Kanazawa et al., from the same field of endeavor, teaches multiplexing of video and audio data into a transport stream (column 1, lines 26-35).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate multiplexing the still images into transport streams as taught by Kanazawa into the still image management of Okada et al. in order to make the still images packaged for transporting over a communication medium.

However, the proposed combination of Okada et al. and Kanazawa et al. does not disclose a navigation area storing at least one playlist and at least one clip information file separately within the navigation area, the playlist including at least one playitem, the playitem indicating at least one of the still picture units to reproduce and providing first and second duration information for display of the still picture in the still picture unit, and the clip information file including at least one entry point map, the entry point map including at least one entry point providing at least an address of a still picture in the transport stream; wherein the first duration information indicates whether to display the still picture for one of a finite and an infinite period of time; and the second duration information indicates a length of time to display the still picture when the first duration information indicates to display the still picture for a finite period of time.

Kato et al. disclose a navigation area storing at least one playlist and at least one clip information file separately within the navigation area (Fig. 14; Fig. 45; [0219]), the playlist including at least one playitem (Fig. 25), the playitem indicating at least one of

the picture data to reproduce and providing second duration information for display of the picture data ([0267]; [0272]; Fig. 32), and the clip information file including at least one entry point map ([0194] ;[0196]), the entry point map including at least one entry point providing at least an address of picture data in the transport stream ([0195]); wherein the second duration information indicates a length of time to display the still picture ([0267]; [0272]; Fig. 32).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the navigation area, the playlist, the playitem, and the entry point map disclosed by Kato et al. into the still image management disclosed by Okada et al. and Kanazawa et al. in order to implement continuous reproduction of picture data (Kato et al., see Abstract).

However, the proposed combination of Okada et al., Kanazawa et al., and Kato et al. does not disclose the first duration information indicates whether to display the still picture for one of a finite and an infinite period of time; and the second duration information indicates a length of time to display the still picture when the first duration information indicates to display the still picture for a finite period of time.

Yoshimura et al. disclose the first duration information indicates whether to display the still picture for one of a finite and an infinite period of time (column 3, lines 1-18; column 14, lines 34-40, 53-63); and the second duration information indicates a length of time to display the still picture when the first duration information indicates to display the still picture for a finite period of time (column 3, lines 1-18; column 14, lines 34-40, 53-63).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the first duration information disclosed by Yoshimura et al. into the computer-readable medium disclosed by Okada et al., Kanazawa et al., and Kato et al. in order to allow users have flexibility to control the duration of the display.

Regarding claim 2, Kanazawa et al. teaches a recording medium wherein the related data in at least one still picture unit includes graphics data and/or subtitle data (column 15, lines 11-17; column 24, lines 40-58).

Regarding claim 4, Kanazawa teaches a recording medium wherein the presentation data is multiplexed into the transport stream on a still picture unit by still picture unit basis (column 1, lines 26 – 35).

Regarding claim 8, Okada also teaches a recording medium wherein each elementary stream of the still picture and associated related data is aligned within the still picture unit (Fig. 4).

Regarding claim 9, Okada teaches a recording medium wherein each elementary stream is a packetized elementary stream (Fig. 4)

Regarding claim 10, Okada teaches a recording medium wherein each still picture still picture unit (fig. 4, SECTOR) includes one packet (PAYLOAD) from each packetized elementary stream (see col. 7, lines 9- 13).

Regarding claim 11, Kato et al. disclose the duration information indicates whether to display the play item, which is the still picture in the combination with Okada et al. as discussed in claim 1 above, for one of a finite and an infinite period of time ([0267]) while Okada et al. disclose a number of the packets of the packetized

elementary stream of still picture data each include a presentation time stamp such that, in combination with Yoshimura et al., when the first duration information indicates display of the still picture for a finite duration, the finite duration is determinable using the presentation time stamp in the packet of the still picture and a presentation time stamp in a next packet (Fig. 10a; column 18, lines 64-67).

Regarding claim 13, Kato et al. disclose a recording medium wherein the data area stores the presentation data in a first clip file, and stores audio data in a second clip file (Fig. 26).

Regarding claim 14, Kato et al. also disclose the playlist further includes at least one sub-playitem (Fig. 25), the sub-playitem providing navigation information for reproducing the audio data from the second clip file (Fig. 26; [0282]; [0283]).

Regarding claim 15, Okada teaches a recording medium wherein the still picture unit includes only one picture (see Fig. 7(b) Still picture #1).

Claim 33 is rejected for the same reason as discussed in claim 1 above.

Claim 34 is rejected for the same reason as discussed in claim 1 above.

Claim 38 is rejected for the same reasons as discussed in claims 10 and 11 above.

Claim 39 is rejected for the same reasons as discussed in claims 13 and 14 above.

Claim 40 is rejected for the same reason as discussed in claim 15 above.

Claim 42 is rejected for the same reasons as discussed in claims 10 and 11 above.

Claim 43 is rejected for the same reasons as discussed in claims 13 and 14 above.

Claim 44 is rejected for the same reason as discussed in claim 15 above.

Claims 6-7, 37, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al. (US Patent 6,122,436), Kanazawa et al. (US Patent 6,580,870), Kato et al. (US 2002/0145702), and Yoshimura et al. (US Patent 6,157,769) as applied to claims 1-2, 4, 8-11, 13-15, 33-34, 38-40, and 42-44 above, and further in view of Ando et al. (US Patent 6,353,702).

Regarding claim 6, see the teachings of Okada et al., Kanazawa et al., Kato et al., and Yoshimura et al. as discussed in claim 1 above. However, the proposed combination of Okada et al., Kanazawa et al., Kato et al., and Yoshimura et al. does not disclose the entry point map includes an entry point associated with each still picture unit.

Ando et al. disclose entry point map includes an entry point associated with each still picture unit (Fig. 17; Fig. 18; column 15, lines 1-3; Fig. 10A; Fig. 10B; Fig. 10C; Fig. 12; column 17, lines 20-25).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the entry point map disclosed by Ando et al. into the still image management disclosed by Okada et al., Kanazawa et al., Kato et al., and Yoshimura et al. in order to implement quick access to each and every still picture. The incorporated feature would allow users to perform fast playback without missing any still

picture, in which each and every still picture could be viewed by a jump operation, thus, enhancing the interface of the still image managing method.

Regarding claim 7, Ando et al. also disclose at least a number of the entry points each include a presentation time stamp associated with the still picture unit such that, when the duration information indicates to display a still picture for a finite duration, the finite duration is determinable at least in part from the presentation time stamp in the entry point associated with the still picture and the presentation time stamp in the next entry point (column 19, lines 37-44).

Claim 37 is rejected for the same reasons as discussed in claims 6 and 7 above.

Claim 41 is rejected for the same reasons as discussed in claims 6 and 7 above.

Claims 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al. (US Patent 6,122,436), Kanazawa et al. (US Patent 6,580,870), Kato et al. (US 2002/0145702), Yoshimura et al. (US Patent 6,157,769), and Monaghan (US 2004/0141436).

Regarding claim 35, see the teachings of Okada et al., Kanazawa et al., Kato et al., and Yoshimura et al. as discussed in claim 1 above. However, the proposed combination of Okada et al., Kanazawa et al., Kato et al., and Yoshimura et al. does not disclose a driver configured to reproduce data record data on the recording medium; and a controller configured to control the optical recording device. Monaghan discloses a driver configured to reproduce data record data on the recording medium (Fig. 1, "write head 155"); and a controller configured to control the optical recording device (Fig. 1, "System Controller 140").

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use a driver (read head) and a controller in order to be able to write data on an optical medium.

Claim 36 is rejected for the same reason as discussed in claim 35 above.

Claims 45-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al. (US Patent 6,122,436), Kanazawa et al. (US Patent 6,580,870), Kato et al. (US 2002/0145702), Yoshimura et al. (US Patent 6,157,769), and Monaghan (US 2004/0141436) as applied to claims 1-2, 4, 8-11, 13-15, 33-36, 38-40, and 42-44 above, and further in view of Ando et al. (US Patent 6,353,702).

Claim 45 is rejected for the same reason as discussed in claim 6 above.

Claim 46 is rejected for the same reason as discussed in claim 7 above.

Claim 47 is rejected for the same reason as discussed in claims 10 and 11 above.

Claim 48 is rejected for the same reason as discussed in claims 13 and 14 above.

Claim 49 is rejected for the same reason as discussed in claim 15 above.

Claim 50 is rejected for the same reason as discussed in claim 6 above.

Claim 51 is rejected for the same reason as discussed in claim 7 above.

Claim 52 is rejected for the same reason as discussed in claims 10 and 11 above.

Claim 53 is rejected for the same reason as discussed in claims 13 and 14 above.

Claim 54 is rejected for the same reason as discussed in claim 15 above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q. Dang whose telephone number is (571)270-1116. The examiner can normally be reached on IFT.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hung Q Dang/
Examiner, Art Unit 2621

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621